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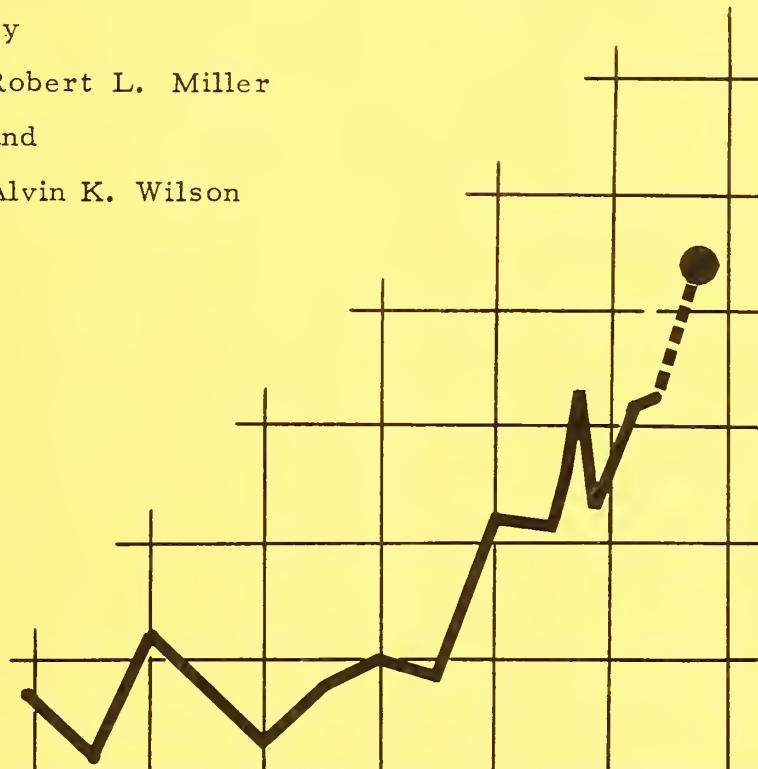
Lumber Production in Wyoming **1957**

by

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and

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FOREST SERVICE

U. S. DEPARTMENT OF AGRICULTURE

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C O N T E N T S

| | <u>Page</u> |
|-----------------------------------|-------------|
| Summary | 1 |
| Production | 1 |
| Trend | 1 |
| Subunits and counties | 3 |
| Species | 4 |
| The sawmill industry | 7 |
| Mill production classes | 7 |
| Status and trends | 7 |
| Survey method | 8 |
| Accuracy of the survey | 9 |

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SUMMARY

Wyoming sawmills produced 108,691,000 board feet^{3/} of lumber in 1957. The long-term upward trend in lumber production is likely to continue. These are the conclusions of a survey recently completed by the Rocky Mountain and the Intermountain Forest and Range Experiment Stations of the Forest Service, U. S. Department of Agriculture, in cooperation with the Bureau of the Census, U. S. Department of Commerce.

Eighty-one percent of Wyoming's 1957 lumber yield was produced east of the Continental Divide. Most of this lumber came from Carbon and Albany Counties. Seventy percent of the output in western Wyoming was sawed in Lincoln County.

Leading species were lodgepole pine and Engelmann spruce, with 47 percent and 33 percent of the State's total output, respectively. National forest records of sawtimber cut indicate that the proportion of Engelmann spruce has increased during the past 10 years and lodgepole pine has remained about the same.

Four-fifths of the State's total came from mills producing 1 million board feet or more annually. The remainder was cut by the typical small mills, which made up 79 percent of all active mills. Numerous mills were idle in 1957. Frequent turnover in operators is common in the industry.

PRODUCTION

TREND

In recent years the trend in lumber production in Wyoming has been upward (fig. 1). Production in 1957 was higher than the

^{3/} Due to subsequent revisions, this estimate differs slightly from the 111 million board feet initially reported by the Forest Service and published in the Bureau of the Census Facts for Industry release, Lumber Production and Mill Stocks, 1957. All units of measure are lumber tally.

average for the previous 5 years, and 33 percent greater than the 1954 estimate of the Census of Manufactures. Apparently this trend was slightly but temporarily affected by the recent recession in the lumber market.

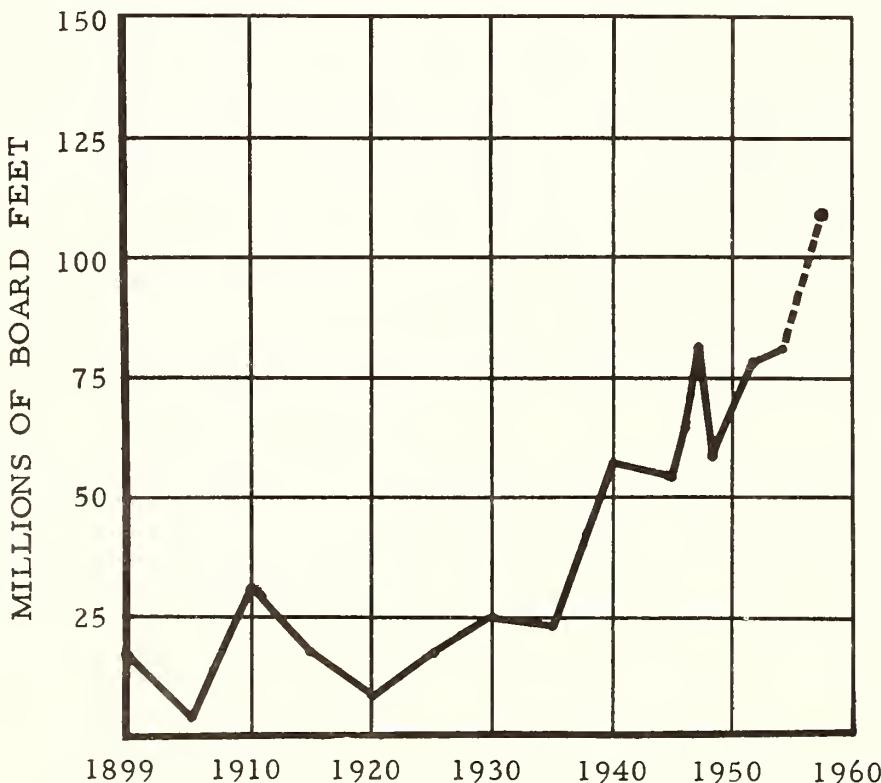


Figure 1. --Lumber production in Wyoming, 1899-1957. The annual production figures for years previous to 1957 were obtained from the following sources:

1899-1945 -- Steer, Henry B. Lumber production in the United States, 1799-1946. U. S. Dept. Agr. Misc. Pub. 669, 233 pp., 1948.
1946, 1947, 1954 -- U. S. Bureau of the Census. Facts for Industry series.

1948 -- U. S. Forest Service. Lumber production in the Western States and Alaska, 1948. 2 pp., 1950. [Processed.]

1952 -- U. S. Forest Service. Timber Resource Review. (Unpublished data.)

1953, 1956 -- U. S. Forest Service. Sawtimber cut reports for national forests of Wyoming. (Unpublished data.)

SUBUNITS AND COUNTIES

Wyoming's lumber production is reported on the basis of western and eastern subunits, separated by the Continental Divide (fig. 2). The 33 active mills in western Wyoming sawed 20.4 million board feet in 1957 (table 1). Eastern Wyoming's 74 active mills cut 88.3 million board feet, four-fifths of the State's total.

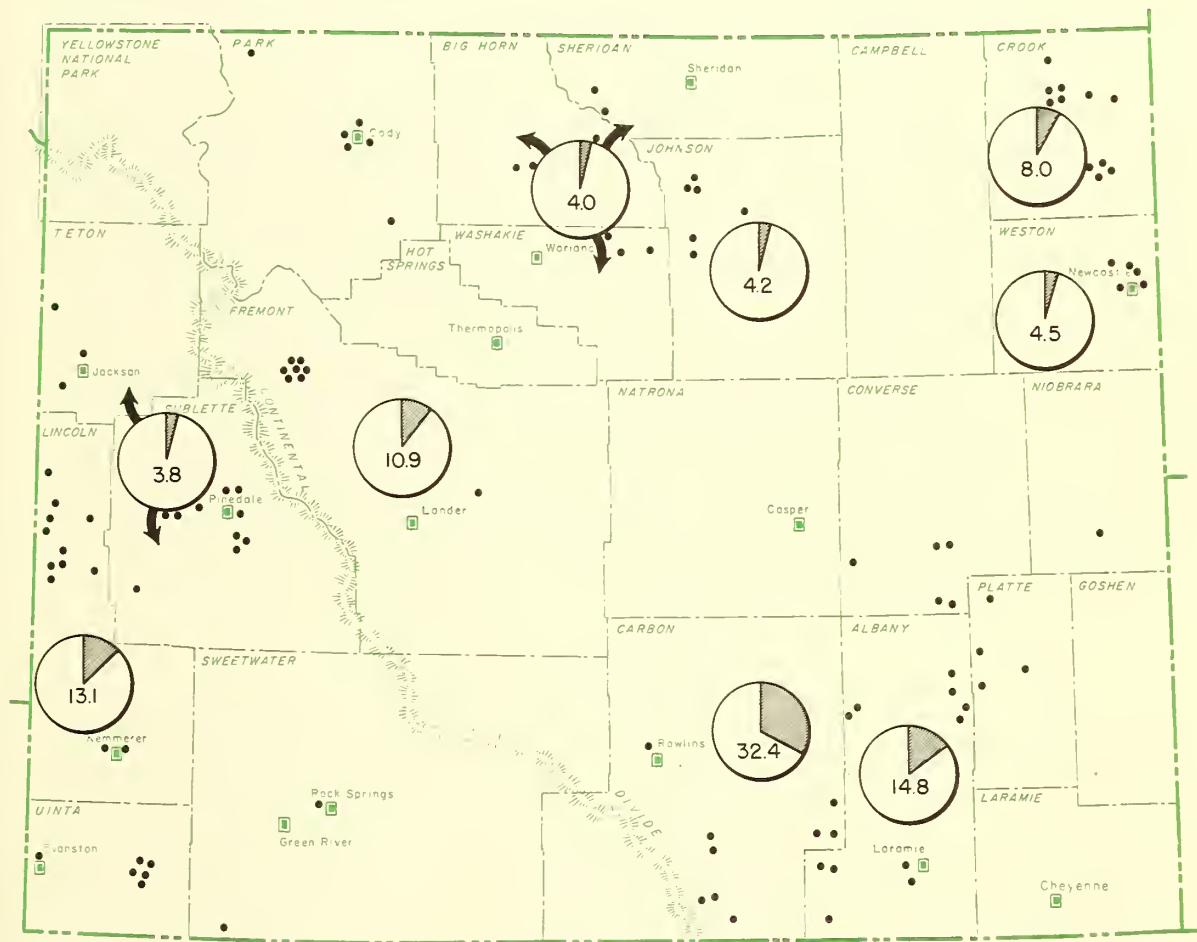


Figure 2.

WYOMING SAWMILLS - 1957
AND
PERCENT OF LUMBER PRODUCTION BY COUNTY

LEGEND

- Sawmills Reporting Production in 1957
- Percent of state lumber production.
(Not shown in Counties or groups of
Counties with less than 2.0%)
- Subunit Boundary (Continental Divide)

Table 1.--Wyoming lumber production by subunits and mill production classes, 1957

| Production class (M b.m. per year) | Active mills | Western Wyoming | | Eastern Wyoming | | State total | |
|---------------------------------------|-----------------|-----------------|---------|-----------------|---------|-------------|---------|
| | No. | M b.m. | Percent | M b.m. | Percent | M b.m. | Percent |
| 1 - 49 | 14 | 407 | 2.0 | 714 | 0.8 | 1,121 | 1.0 |
| 50 - 199 | 29 | 1,024 | 5.0 | 2,174 | 2.5 | 3,198 | 2.9 |
| 200 - 499 | 26 | 1,534 | 7.5 | 5,628 | 6.4 | 7,162 | 6.6 |
| 500 - 999 | 16 | 2,997 | 14.7 | 7,329 | 8.3 | 10,326 | 9.5 |
| 1,000 - 4,999 | 19 | 8,372 | 41.0 | 39,420 | 44.6 | 47,792 | 44.0 |
| 5,000 and over | 3 | 6,092 | 29.8 | 33,000 | 37.4 | 39,092 | 36.0 |
| Total | 107 | 20,426 | 100.0 | 88,265 | 100.0 | 1/108,691 | 100.0 |

1/ See footnote 3, page 1.

Eighteen of the 23 Wyoming counties yielded lumber in 1957 (table 2). Seventy-nine percent of the State's total output came from 5 counties, 4 of which are in eastern Wyoming. Carbon County led with 35.2 million board feet, almost one-third of the State's total, and was followed by Albany, Lincoln, Fremont, and Crook Counties. Production in these counties was characterized by large mills. The average production per mill in the 5 leading counties was 169,000 board feet, as compared with only 40,000 board feet in the remaining counties. The major lodgepole producing counties were Carbon and Albany, together yielding 65 percent of the State's total lodgepole output. Carbon and Lincoln Counties led in Engelmann spruce, with 68 percent of the spruce total. More than half of the State's ponderosa pine lumber came from Crook County.

SPECIES

Lodgepole pine led in production in the State, followed by Engelmann spruce and ponderosa pine. Together these three species made up nine-tenths of the State's total production (fig. 3). The ranking of species was the same in the eastern subunit as in the State as a whole (table 3). Lodgepole pine made up more than half of the output in eastern Wyoming. However, Engelmann spruce was far in the lead in western Wyoming, with 60 percent of the subunit production. Ponderosa pine was important only in the eastern subunit. Most of the Douglas-fir volume was produced in western Wyoming.

Records of sawtimber cut on the national forests indicate that Engelmann spruce has increased in recent years in actual volume sawed and in proportion of total State output. Lodgepole pine has

Table 2.-Wyoming lumber production by subunits, counties, and species, 1957

| Subunit and county | Number | Active sawmills | Ponderosa pine | Lodgepole pine | Douglas fir | True fir ^{1/} | Engelmann spruce | Other species | Total | Proportion |
|---|--------|---------------------------------------|----------------|----------------|-------------|------------------------|------------------|---------------|-------|------------|
| | | Thousands of board feet, lumber tally | | | | | | | | Percent |
| <u>WESTERN</u> | | | | | | | | | | |
| Lincoln | 12 | 0 | 1,309 | 2,030 | 299 | 10,643 | 0 | 14,281 | 13,1 | |
| Sublette, ^{2/} Teton ^{2/} | 13 | 0 | 2,587 | 492 | 31 | 991 | 0 | 4,101 | 3,8 | |
| Sweetwater, ^{2/} Uinta | 8 | 200 | 919 | 250 | 0 | 670 | 5 | 2,044 | 1,9 | |
| Total, Western | 33 | 200 | 4,815 | 2,772 | 330 | 12,304 | 5 | 20,426 | 18,8 | |
| <u>EASTERN</u> | | | | | | | | | | |
| Albany | 11 | 722 | 12,258 | 0 | 0 | 3,144 | 0 | 16,124 | 14,8 | |
| Bighorn, Sheridan, Washakie | 8 | 220 | 2,272 | 384 | 3 | 1,498 | 0 | 4,377 | 4,0 | |
| Carbon | 9 | 122 | 21,024 | 0 | 42 | 13,974 | 0 | 35,162 | 32,4 | |
| Converse, Niobrara | 6 | 1,127 | 86 | 0 | 0 | 0 | 0 | 1,213 | 1,1 | |
| Crook | 11 | 8,726 | 0 | 0 | 0 | 0 | 0 | 8,726 | 8,0 | |
| Fremont | 8 | 0 | 6,927 | 560 | 25 | 4,267 | 57 | 11,836 | 10,9 | |
| Johnson | 6 | 0 | 3,755 | 287 | 0 | 551 | 0 | 4,593 | 4,2 | |
| Park | 6 | 0 | 240 | 398 | 0 | 312 | 0 | 950 | .9 | |
| Platte | 4 | 390 | 0 | 0 | 0 | 0 | 0 | 390 | .4 | |
| Weston | 5 | 4,894 | 0 | 0 | 0 | 0 | 0 | 4,894 | 4,5 | |
| Total, Eastern | 74 | 16,201 | 46,562 | 1,629 | 70 | 23,746 | 57 | 88,265 | 81.2 | |
| Total, Wyoming | 107 | 16,401 | 51,377 | 4,401 | 400 | 36,050 | 62 | 3/108,691 | 100.0 | |

^{1/} Includes subalpine fir and white fir.^{2/} The Continental Divide lies within Sweetwater County and to a small extent within Sublette and Teton Counties, but all lumber production in these counties was west of the Divide.^{3/} See footnote 3, page 1.

also increased in actual volume but remained about the same in proportion of total output. No trends are discernible on the other species, except that ponderosa pine has declined in recent years in the proportion of national forest sawtimber cut.

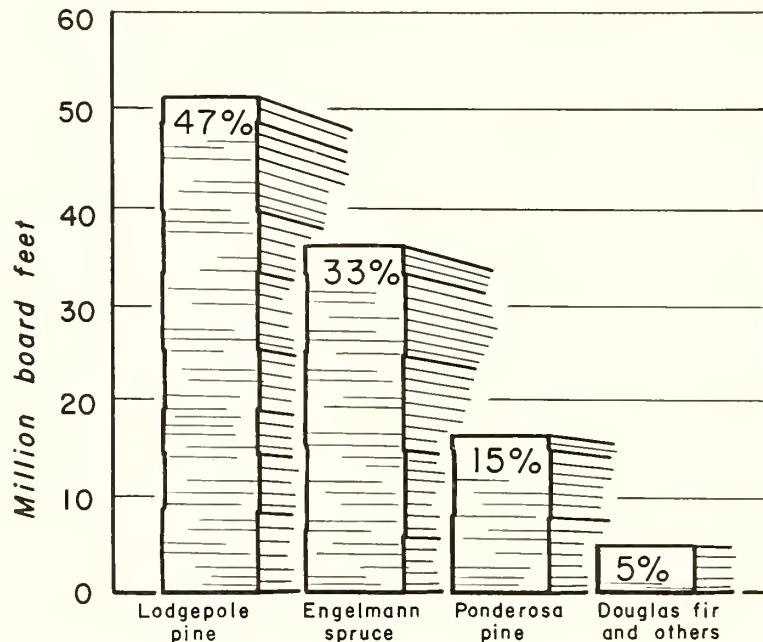


Figure 3. --Wyoming's 1957 lumber production by species.

Table 3. --Wyoming lumber production by subunits and species, 1957

| Species | Western Wyoming | | Eastern Wyoming | | State total | |
|------------------|-----------------|---------|-----------------|---------|-------------|---------|
| | M b.m. | Percent | M b.m. | Percent | M b.m. | Percent |
| Lodgepole pine | 4,815 | 23.6 | 46,562 | 52.8 | 51,377 | 47.3 |
| Engelmann spruce | 12,304 | 60.2 | 23,746 | 26.9 | 36,050 | 33.2 |
| Ponderosa pine | 200 | 1.0 | 16,201 | 18.4 | 16,401 | 15.1 |
| Douglas-fir | 2,772 | 13.6 | 1,629 | 1.9 | 4,401 | 4.0 |
| True firs | 330 | 1.6 | 70 | (1/) | 400 | .4 |
| Other | 5 | (1/) | 57 | (1/) | 62 | (1/) |
| Total | 20,426 | 100.0 | 88,265 | 100.0 | 108,691 | 100.0 |

1/ Less than 0.1 percent.

2/ See footnote 3, page 1.

THE SAWMILL INDUSTRY

MILL PRODUCTION CLASSES

On the basis of 1957 production, sawmills were grouped into 6 size classes (fig. 4). Only 3 of the mills produced more than 5 million board feet during the year, yet their output made up 36 percent of the State's total (see table 1). One-fifth of the mills, those producing 1 million board feet or more annually, produced four-fifths of the State's total output. However, in terms of numbers, the Wyoming sawmill industry is characterized by small mills. Sixty-four percent of the mills operating in 1957 produced less than 500,000 board feet.

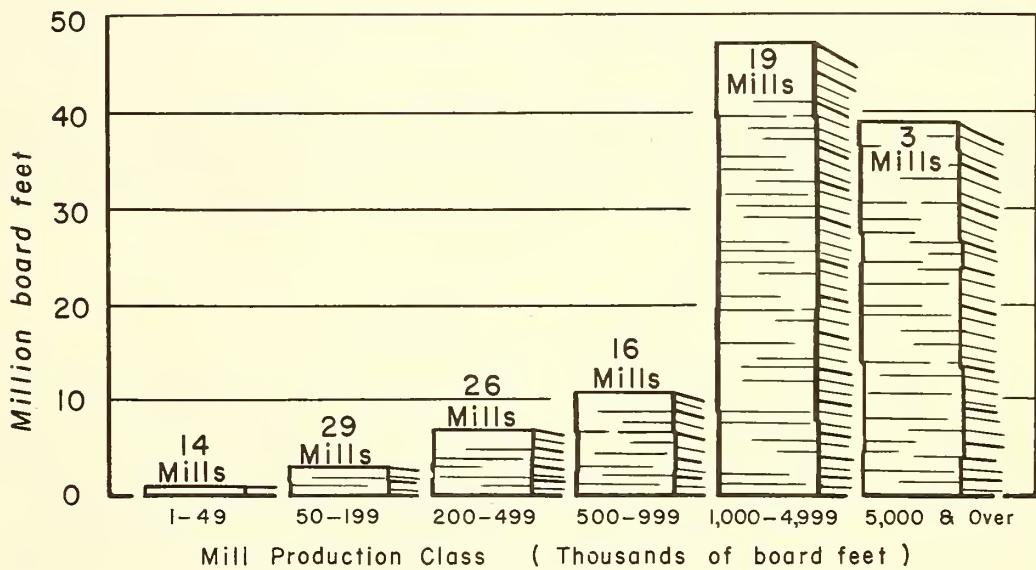


Figure 4. -- Wyoming's 1957 lumber production by mill production classes.

STATUS AND TRENDS

A comparison of mills active in 1957 in eastern Wyoming with mills active in 1954 in the same area revealed a small increase in numbers. The proportion of mills producing less than 500,000 board feet remained about the same. There were fewer mills sawing 500,000 to 1 million board feet in 1957. The number of mills cutting 1 million board feet or more increased from 11 in 1954 to 22 in 1957.

The comparison with 1954 operations indicates a high rate of turnover in mill owners or operators. About 34 percent of the mills operating in 1957 were either new, reactivated, or were placed under new management since 1954. There was no apparent difference between mill production classes in change of status.

No information on previous years is available on western Wyoming for similar comparisons of mill numbers and operating status, but it is probable that similar changes occurred.

Forty-three percent of the mills that sawed less than 1 million board feet in 1957 also reported a full year of operating status. However, in view of their low production rates, it appears that the operation of these mills was intermittent even though they may have operated in all seasons. On this basis, 21 percent of the mills active in Wyoming in 1957 produced on a full-time or all-year basis. One-shift production is assumed in these estimates.

Of the 144 mills existing in Wyoming in 1957, 37 did not operate. Most of the idle mills have an estimated production capacity of less than 500,000 board feet. Only one new mill operation was started in 1957. No mills went out of business during the year.

SURVEY METHOD

The survey of Wyoming's 1957 lumber production was done primarily by mail and in accordance with a cooperative agreement between the Forest Service and the Bureau of the Census. A complete mailing list of sawmills was prepared with the help of the national forests, the Wyoming State Forester, the Bureau of Land Management, and the Bureau of Indian Affairs. It was integrated with a list of basic sample mills provided by the Bureau of the Census. Most of the production data were obtained by mailing inquiries to all sawmill operators on the revised list.

Production reports were obtained from all mills producing 1 million board feet or more. It was necessary to estimate the annual production of nonresponding active mills (mills that didn't reply) in the four smaller production classes only. Field sample contacts were made with a minimum random sample of 10 percent of the nonresponding mills producing 1/2 to 1 million board feet a year, and 5 percent of those in each of the 3 lower classes. Nonrespondent production was estimated on the basis of the sample and then added to the total production of respondents to obtain the total estimated production for the State.

ACCURACY OF THE SURVEY

Lumber production reports were obtained from 80 active respondent mills. The total production of these respondent mills was 101,484,000 board feet, or 93.4 percent of Wyoming's 1957 lumber production.

On the basis of the sample, an additional 7,207,000 board feet was estimated for the 27 active nonrespondent mills. The sampling error was 21.2 percent of the estimated part of the State's output, and 1.4 percent of the State's total production.

The production of 2,577,000 board feet obtained by contact with the sample mills was also included in county and State totals so that the production of 89 of the State's active mills was actually reported by species, mill class, and county. Reports were obtained from all mills in Albany, Fremont, Sheridan, Sweetwater, Teton, and Uinta Counties. Part of the production in each of the remaining counties was estimated, with sampling error undetermined but probably larger than the error of the State estimate.

